

An adaptive multifilar antenna comprising:

a number of spaced filaments, where said number is an integer greater than 1;  
a matching circuit for matching the characteristic impedance of the antenna to that of a transmitting and/or receiving apparatus;

a weighting circuit operable to apply respective phase adjustments to signals passed to and/or from the spaced filaments;

detecting means operable to detect at least one electrical property of the multifilar antenna with respect to the frequency, polarisation and/or direction of propagation of a signal to be received or transmitted by the multifilar antenna and/or impedance matching of the antenna; and

control means, responsive to the detecting means, operable to control the operation of the weighting circuit to adjust the properties of the multifilar antenna to suit better a current signal to be received or transmitted.

Please replace claim 2 with the following:

2. (Amended)

An antenna according to claim 1, wherein the weighting circuit is operable to apply gain adjustments to signals passed to and/or from the spaced filaments.

Please replace claim 7 with the following:

7. (Twice Amended)

An antenna according to claim 1, in which:

the detecting means is operable to detect a signal to noise plus interference ratio of a received signal; and

the control means is operable to control the operation of the matching circuit and/or the weighting circuit so as to improve the signal to noise plus interference ratio

of the received signal.

Please replace claim 14 with the following:

14. (Twice Amended)

An antenna according to claim 1, in which said number is an even integer.

Please replace claim 15 with the following:

15. (Twice Amended)

An antenna according to claim 1, in which said number is equal to 4 or 6.

Please replace claim 22 with the following:

22. (Amended)

An adaptive multifilar antenna comprising:

- a number of spaced antenna filaments, where said number is an integer greater than 1;

- a matching circuit for matching the characteristic impedance of the antenna to that of a transmitting and/or receiving apparatus;

- a phasing circuit for applying respective gain and phase adjustments to signals passed to or from the spaced filaments;

- switch means associated with each filament for selectively altering the electrical length and/or interconnections of the filaments;

- means for detecting electrical properties of the multifilar antenna with respect to the frequency, polarisation and/or direction of propagation of a signal to be received or transmitted by the multifilar antenna and/or impedance matching of the antenna;